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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,283	11/26/2001	Jin Young Chun	CU-2732 RJS	8829

26530 7590 07/17/2003

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EXAMINER
SEFER, AHMED N

ART UNIT	PAPER NUMBER
2826	

DATE MAILED: 07/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/994,283	Applicant(s) CHUN ET AL	
	Examiner A. Sefer	Art Unit 2826	

-- Th MAILING DATE of this communication appears on the cover she t with the c rrespondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-5 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-5 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Fig. 3 does not include reference numerals 12, 16, 21, 22 and 24. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujimura et al. USPN 5,973,763.

Fujimura et al. disclose in figs. 1, 2 and 7-9 a liquid crystal display device comprising: a supporting column 13 provided for an upper substrate 20 and vertically extended from the upper substrate so as to maintain a uniform cell gap; a contact part 17/18 provided for a common line disposed at a peripheral region outside an active area A of a lower substrate 10 confronting the upper substrate, wherein the contact part faces the supporting column at a corresponding position so as to guide a communication between the supporting column and the common line; and an electrically conductive layer (see lower portion of reference numeral 13 in fig. 2) formed

on surfaces of the supporting column and the upper substrate, wherein a portion of the electrically conductive layer on the supporting column is joined to the common line B within the contact part so as to establish a signal interconnection between the lower substrate and the upper substrate.

As for claim 2, Fujimura et al. disclose (see col. 7, lines 1-6) an insulating layer provided for the common line, and the contact part is a contact hole formed in the insulating layer so as to expose a portion of the common line.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Kurauchi et al. USPN 5,917,572.

Kurauchi et al. disclose (figs. 2, 21 and col. 17, lines 20-25) a liquid crystal display device comprising: a supporting column 33 provided for an upper substrate 31 and vertically extended from the upper substrate so as to maintain a uniform cell gap; a contact part (unnumbered) provided for a common line 13 disposed at a peripheral region outside an active area of a lower substrate 11 confronting the upper substrate, wherein the contact part faces the supporting column at a corresponding position so as to guide a communication between the supporting column and the common line; and an electrically conductive layer 34 formed on surfaces of the supporting column and the upper substrate, wherein a portion of the electrically conductive layer on the supporting column is joined to the common line within the contact part so as to establish a signal interconnection between the lower substrate and the upper substrate.

As for claim 2, Kurauchi et al. in fig. 17 disclose an insulating layer 221 provided for the common line, and a contact part which is a contact hole formed in the insulating layer so as to expose a portion of a common line.

5. Claims 3 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujimura et al. USPN 5,973,763.

Fujimura et al. disclose (see figs. 1, 2, 7-9, col. 3, lines 54-60 and col. 9, lines 51-67) a method for fabricating a liquid crystal display device, comprising: providing a supporting column for an upper substrate 20, wherein the supporting column is vertically extended from the upper substrate so as to maintain a uniform cell gap; forming an electrically conductive layer (see lower portion of reference numeral 13 in fig. 2) on surfaces of the supporting column and the upper substrate; providing a contact part 17/18 for a common line B disposed at a peripheral region outside an active area of a lower substrate 10 confronting the upper substrate, wherein the contact part faces the supporting column at a corresponding position; and uniting the lower substrate and the upper substrate so that a portion of the electrically conductive layer on the supporting column is joined to the common line within the contact part, thereby establishing a signal interconnection between the lower substrate and the upper substrate.

As to claim 4, Fujimura et al. disclose (see col. 7, lines 1-6) an insulating layer for the common line and forming a contact hole in the insulating layer so as to expose a portion of the common line.

6. Claims 3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Kurauchi et al. USPN 5,917,572.

Kurauchi et al. disclose (figs. 2, 21 and col. 17, lines 20-25) a method for fabricating a liquid crystal display device, comprising: providing a supporting column 33 for an upper substrate 31, wherein the supporting column is vertically extended from the upper substrate so as to maintain a uniform cell gap; forming an electrically conductive layer 34 including an

indium tin oxide (ITO) layer (as in claim 5) on surfaces of the supporting column and the upper substrate; providing a contact part (unnumbered) for a common line 13 disposed at a peripheral region outside an active area of a lower substrate 11 confronting the upper substrate, wherein the contact part faces the supporting column at a corresponding position; and uniting the lower substrate and the upper substrate so that a portion of the electrically conductive layer on the supporting column is joined to the common line within the contact part, thereby establishing a signal interconnection between the lower substrate and the upper substrate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Sefer whose telephone number is (703) 605-1227

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (703) 308-6601.

ANS
July 12, 2003

NATHAN J. FLYNN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800